

FIG. 1A

FIG. 1A-1
FIG. 1A-2
FIG. 1A-3

SEQ ID NO: 1	MtubZ94752	<u>mlrlvqallvlafaggyavaackvtltvdgtamrvttmksrvidive</u>	50
	MtubZ94752	engfsvddrddlypaagvqvhdadtivlrrsrplqisldghdakgvwtta	100
	MtubZ94752	stvdealaglamtdtapaaasrasrvplsgmalpvvsaktvqIndgglvr	150
	MtubZ94752	tvhlpapnvagllsaagvpllqsdhvvpaatapivegmqiqvtrnrirkv	200
SEQ ID NO: 2	MtubMTV008	<u>mpvgwlwrartakgttlknarttliaaiaqt</u>	32
SEQ ID NO: 3	Mlep104666	<u>msesyrrkl</u>	8
SEQ ID NO: 4	MtubMTV043	<u>msgrrhrkpt</u>	9
	MtubZ94752	terlplppnarrvedpemmsrevvedpgvpqtdvtfavaevngvetgr	250
SEQ ID NO: 36	MlutZ96935	<u>mtlfttsat</u>	9
SEQ ID NO: 5	MlepL01095	<u>mpgemldvrklc</u>	12
SEQ ID NO: 6	MtubU38939	<u>mhlpladhgrsrcnrhpsplslnisatsgdmssmt</u>	38
SEQ ID NO: 7	MtubZ81368	<u>mtpgllttagagrprdrca</u>	19
	MtubMTV008	<u>lvttspaqianaddagldpnaaagpdavgfdpnlppapdaapvdtppape</u>	82

FIG. 1A-1

SEQ ID NO: 8	Scoeli6C12S	-----irtaavtlvaatalqatgeavaapsaplrtdwdalaacessgnwqan	25
	Mlep104666	ttssliivakitftgamldgsialagqaspatdsewdqvarcesgcnwsin	58
	MtubMTV043	tsnvsvakiaftgavlqgggiamaaqaataatdgenqvarcesgcnwsin	59
	MtubZ94752	lpvanvvtpaheavrvgtkpgtevpvpidgsiwdaiagceaggnwain	300
	MlutZ96935	rsrratasivagmtlagaaaavgfsapagaatvdtwdrlaecesengtwdin	59
	MlepL01095	klfvksavvsgivtasmlststqmanavprepnwddavaocesggnwran	62
	MtubU38939	riakpliksamaaqlvtasmslstavahagpspnwddavaocesggnwaan	88
	MtubZ81368	rivctvfietavvatmfvallqlstisskaddidwdaiacocesggnwaan	69
	MtubMTV008	dagfdpnlppplapdfllspaeappvpvaysvnwddaiacocesgcnwsin	132
		.* ** *	
	Scoeli6C12S	TGNGVYGGLOFARSSWIAAGGLKYAPRADLATRGEQIYAERLARLQGMS	75
	Mlep104666	TGNGVYGGLOFQSQGTWASHGGGEYAPSAQLATREQQIYAERVLATQSG	108
	MtubMTV043	TGNGVYGGLOFTQSTWAAHGGGEFAPSAQLASREQQIYAGERVLATQGRG	109
	MtubZ94752	TGNGVYGGVQFDQGTWEANGGLRYAPRADLATREEQIYAEVTRLRQGWG	350
	MlutZ96935	TGNGFYGGVQFTLSSNQAVGEG-----YPHQASKAEQIKRAEILQDLQGWG	106
	MlepL01095	TGNGFYGGLOFKPTINARYGCVG-----NPAGASREQQITVANRVLADQGLD	109
	MtubU38939	TGNGKYGGLOFKPATWAAFGGVG-----NPAAASREQQIYAVANKVLAEQGLD	135
	MtubZ81368	TGNGLYGGLOQISQATWDSNGGVG-----SPAASPPQQIEVADNIMKTQCPG	116
	MtubMTV008	TGNGVYGGLOFTAGTWRANGSG-----SAANASREEQIRVAENVLRSQGR	179
		****,* ***** .*. * *	
		. ***** ** *	

FIG. 1A-2

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Scoel16C12\$	AM	78
Mlep104666	ANFACGHGLSGESLQEVLPAG--MGAPW----	152
MtubMTV043	ANPVCGRGLSNATPREVLPA SaANDAP1daaaVNGEPAPLA-PPPADPAP	158
MtubZ94752	ANPVCaazagar-	362
MlutZ96935	ANPLCSQKLgltqadadagdvdateaapvavertatvqrgsaadeaaeq	156
MlepL01095	ANPKCGAASDLPIITLWSHPAQGVKQIINDIImgdtlaaialngl--	155
MtubU38939	ANPTCGAASGLPIALWSKPAQGIKQIINEIiwagigasipr--	176
MtubZ81368	ANPKSSscsqgdaplgslthlltflaetggcgsrdd--	154
MtubMTV008	ANPVCGrfg	188
	*** *	
Mlep104666	pqqpadnf	174
MtubMTV043	pvelaandlpaplgelpaapadpappadlapPAPADVAPPVelaVndlp	208
MlutZ96935	aaaaeqavvaeaetivvksqdsIwtlaneyeveggwtalyeankgavsd	206
MtubMTV043	aplgeplpaapadpappadlapPAPadlapPAPadlapPAPvel	258
MlutZ96935	aviyvggelvlpqa	220
MtubMTV043	avndlpaplgelpaapaelappadlapasadlapPAPadlapPAPaela	308
MtubMTV043	ppapadlapPAPavneqtapgdqpatapggvpvlatdlelpepdppadap	358
MtubMTV043	ppgdivteaPaetpqvsniaytkklwqairaqdvvcgndaldslagpyvig-	407

FIG. 1A-3

FIG. 1B

FIG. 1B-1
FIG. 1B-2

SEQ ID NO: 9	A	YabBsubt	mgeregrvdslldtlynlseekeaffitgmkklfsvklSKSVILVAACLLAGSGTAYAAHETKQSVSVSINGKXKHIR	82
SEQ ID NO: 1	A	MtubZ94752HLRLVVGALLVLAFAAG-YAVAACKTVTLTVDGTMR---VF	39
SEQ ID NO: 10	A	YochBsubtmktimsfvav	11
	A	YabBsubt	THANTVGDLLLETLDIKTRDEOKITPAKQKITADMDVVYEAKPVKLTING--EEKLWSTAKTWGALLDEQDQDVVKEQDQID	163
	A	MtubZ94752	TMKSRVIDIVEENGFSVDDRDLLYPACGVQVHDADTIVLRRSRPLQISLDGHDAKQWTPASVVDALAGLAWDTAPAAAS	121
SEQ ID NO: 11	A	Caceto506KR?AVILMVAVITTISSMKKNITVNI DG--KTSKITVKSNEGSLSKNNILVGPDKIQ	59
			# # #	

FIG. 1B-1

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SEQ ID NO: 13	RPF	TIVKSGDSLWTLANE--YEVEGGWTALYEANKGAVS-----DAAVIYVGQELVLPQA
SEQ ID NO: 14	g149657	TIKVKSGDSLWKLRSQ-YDIT--ISALKSENKL-----KSTVLYVGQSLKVPES
SEQ ID NO: 15	g2226145	TIKVKSGDSLWKLQAT-YNTS---VAALTSANIL-----STTVLSIGQTLTIP---
SEQ ID NO: 16	g2226145	TYTVKSGDSLWVIAQK-FNVT--AQQIREKNL-----KTDVLQVGQKLVI----
SEQ ID NO: 17	g2226145	KYTVKSGDSLWKIANN-INLT--VQQIRNINNL-----KSDVLYVGQVLKL----
SEQ ID NO: 18	g266725	TYTVKSGDTIWALSSK-YGTS---VQNIMSWNL-----SSSIYVGQVLAVKQ--
SEQ ID NO: 19	g80581	THAVKSGDTIWALSVK-YGVS---VQDIMSNNL-----SSSIYVGQKLAIKQ--
SEQ ID NO: 20	g2707292	SVKVKSGDTIWALSVK-YKTS---IAQLKSWNHL-----SSDTIYIGQNLIVSQS
SEQ ID NO: 21	g755216	TYTVKSGDTLNGISQR-YGIS---VAQIQSANNL-----KSTIYIGQKLIL----
SEQ ID NO: 22	g1722873	TYTVKKGDTLWDIAGRFYGNSTQWEKIWNANKTAMIKRSKRNIROPGHWIFPGQKLKIPQ--
SEQ ID NO: 23	g1176755	TYTVKKGDTLMDLAGKFYGDSTKWKIWKVKKKAMIKRSKRNIROPGHWIFPGQKLKIPQ--
		° *** ** ' ' * *

FIG. 1C

FIG. 1D

FIG. 1D-1
FIG. 1D-2

SEQ ID NO: 4 1 msgzhrkpttsnvsvakiaftgavl9gggiamaaqataatdgewdqvarcesgggnwsintgngylgg
lqftgstwaahgggefapsaglasreqqiavgervlatqgrgawpvcgrglsnatprevlpasaamd
apldaaavngepaplapppadp 156

157 appvelaandlpaplgelpaapadpappadlappapadv 196
197 appvelavndlpaplgelpaapadpappadlappapadlappapadl 252
253 appvelavndlpaplgelpaapaelappadlap-asadlappapadlappaelappapadlappa
320 -----avne 323

324 qtapgdqpatapggpglatdlelpepdpqpadapppgdvteapaetpgvsniaaytkklwqaira
389 qdvcgndaldslagpyvig* 407

Motif	sequence
A	157 appvelaandl 167 SEQ ID NO: 25
B'	168 paplgelpaapad 181 SEQ ID NO: 28
C	182 pappadl 188 SEQ ID NO: 29
D	189 appapadv 196 SEQ ID NO: 31

FIG. 1D-1

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A	197 appvelavndl	207	SEQ	ID NO:	26
B'	208 paplgeplpaapad	221	SEQ	ID NO:	63
C	222 pappadl	228	SEQ	ID NO:	29
D	229 appapadl	236	SEQ	ID NO:	30
D	237 appapadl	244	SEQ	ID NO:	30
D	245 appapadl	252	SEQ	ID NO:	30
A	253 appvelavndl	263	SEQ	ID NO:	26
B	264 paplgeplpaapael	278	SEQ	ID NO:	27
'C	279 appadl	284	SEQ	ID NO:	55
D*	285 apasadl	291	SEQ	ID NO:	56
D	292 appapadl	299	SEQ	ID NO:	30
D	300 appapael	307	SEQ	ID NO:	57
D	308 appapadl	315	SEQ	ID NO:	30
D'	316 appa	319	SEQ	ID NO:	58
'A'	320 avne	323	SEQ	ID NO:	59

A = appvela[av]ndl SEQ. ID NO: 62

B = paplgeplpaapa[de]l SEQ. ID NO: 60

C = pappadl SEQ. ID NO: 29

D = appapa[de][lv] SEQ. ID NO: 61

FIG. 1D-2

REPLACEMENT SHEET

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```
SEQ ID NO:34 Lmonocytoγ.. mnmkkaatiaa[ta]giav[ta]faa[pt]ia[st]v[ve]a[gd]tlw[gi]a[sk]gtt[va]da[ik]kannl[tt]dki[vp]gqkiqvn 72
SEQ ID NO:36 MlutFactor m[tl]lft[ts]at[rs]r[ra]ta[si]v[ag]m[tl]a[ga]a[av]g[fs]apa[qa]t[-----]v[dt]w[dr]la[ec]e[sn]g[td]i[n]t[gn] 62

Lmonocytoγ.. nevaa[ek]te[ks]v[sa]twl[nv]rt[ga]v[dn]si[its]ik[gg]ktv[te]sngwhkity[nd]gktgfvngkyltdka 144
MlutFactor gfyggv[gd]ftl[ss]wgav[gg]gyphq[---]a[sk]a[eq]ik[ra]eilqdlq[gg]awp[lc]sqklgltqadadag[-----] 125

Lmonocytoγ.. vstp[va]ptqevk[et]tt[qa]a[pa]v[ae]tk[te]v[k]t[ta]tt[pa]pkv[ae]tketp[vi]d[on]a[tt]h[av]ksgdti[va]d[sv] 216
MlutFactor -----[dv]d[ate]a[ap]v[av]e[rt]a[tv]q[rs]a[de]a[ae]q[aa]a[ae]q[av]v[ae]t[iv]v[ksgd]slv[td]a[n] 184

Lmonocytoγ.. KYGVsvqdim[wn]n1[-----]SSSSiYVGQKDAIKQ[ta]ntatpkaevkteapaaekqaapv[kent]ntntatt 283
MlutFactor EYEV[eg]gwtalyeankgav[SDAAV]IYVGQEDVLPQA[-----]----- 220

Lmonocytoγ.. ekketatqqqtapkapteaakpapapstntnanktntntntntpskntntnsntntntnsntnanqgss 355
MlutFactor ----- 220

Lmonocytoγ.. nnnssasaiiaeqkhl[kay]swgngpttfdcs[gy]kyvfakagislprtsgaqyasttrisesqakpg 427
MlutFactor ----- 220

Lmonocytoγ.. dlvfddyggishvgiyvnggqminaqdngvkydni[hsg]wgkylvgfgrv 478
MlutFactor ----- 220
```

FIG. 1E

FIG. 2A

FIG. 2A-1
FIG. 2A-2

```
SEQ ID NO: 35  1  accaaggagaaggacgaccccggtgtgcctcggccgcgatcagcgaggactcgccatgg  60
61  acaccatgactctcttcaccacttcggccaccgctcccgccgtgccaccgctcgatcg  120
      M T L F T T S A T R S R R A T A S I V
121  tcgcgggcataccctcgcgcggcgccgcgcgtgggttctccgccccgcccaggcgg  180
      A G M T L A G A A A V G F S A P A Q A A
      SEQ ID NO: 37  g
      SEQ ID NO: 38  A
      oligo A1>>>
      csacsgtsgacacstgggacgcgctsgcsgag
181  ccaccgtggacacctgggaccgcctcgcgcgagtgcgagtcaccaacggcacctgggacatca  240
      T V D T W D R L A E C E S N G T W D I N
      T V D T W D R L A E E X S N G T X D
      <<< oligo G2      SEQ ID NO: 40  oligo G1>>>
      gttgcggaagatgcgcgc      agttcacccctgtcctcctg
SEQ ID NO: 39  241  acaccggcaacggcttctacggcggcgtgcagttcacccctgtcctcctggcaggccgtcg  300
      T G N G F Y G G V Q F T L S S W Q A V G
      SEQ ID NO: 42  G
```

FIG. 2A-1

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SEQ ID NO: 41 <<< Oligo A2
 ccictycciatrggigtgrgtcgc
301 gcggcgaggctaccgcaccagcctcgaaggccgagcagatcaagcgccgagatcc 360
 G E G Y P H Q A S K A E Q I K R A E I L
 G E G Y P H Q A S K
361 tccaggacctgcagggtgggctggcgctgtgctcgcagaagctgggctgaccc 420
 Q D L Q G W G A W P L C S Q K L G L T Q
421 aggtgacgcggacgcggtgactggacgccaccgagccgcccgctcgcgtggagc 480
 A D A D A G D V D A T E A A P V A V E R
481 gcacggccacctgcagcgccagtcgcccgcgagcaggtgccgcgagcagcgcctg 540
 T A T V Q R Q S A A D E A A E Q A A
541 ccgcgagcagcgtcgtccgagcgcgagaccatcgtcgtcaagtcgggtgactccc 600
 A E Q A V V A E A E T I V V K S G D S L
601 tctggacgctgcccaacgagtagcaggtggaggtggctggaccgccctctacgagcca 660
 W T L A N E Y E V E G G W T A L Y E A N
661 acaaggcgccgtctccgacgcgcgctgattctacgtcggccaggagctcgtccctgccc 720
 K G A V S D A A V I Y V G Q E L V L P Q
721 aggcctgagacgctgacccgccccccgacgggtacc 758
 A *

SEQ ID NO: 43 1 ATVDTWDLA ECESNGTWDI NTGNFYGGV QFTLSSWQAV GGEYPHQAS KAEQIKRAEI 60
61 LODLQGNQAW PLCSOKLGLT QADADAGDVD ATEAAPVAVE RTATVQRQSA ADEAAAEQAA 120
121 AREQAVVAEA ETIVVKSGDS LWTLANEYEV EGGWTALYEA NKGAVSDAAV IYVGQELVLP QA 182

FIG. 2A-2

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SEQ ID NO:44 ggatccgcaccgcgcggtaccctggtcgcgcgcgcactcggggcgaccggcgaag 60
SEQ ID NO:45 I R T A A V T L V A A T A L G A T G E A
cggtggccgcgcctcggcgccctcgcgcaccgactgggacgccatcgcgcgtgcgagt 120
V A A P S A P L R T D W D A I A A C E S
ccagcggaactggcaggcgaacaccggcaacggctactacggcgccctgcagttcgcac 180
S G N W Q A N T G N G Y Y G G L Q F A R
ggtcagctggatcgccgcgcgcgcctcaagtaagcccgcgcgacctgcacccc 240
S S W I A A G G L K Y A P R A D L A T R
gcggcgagcagatcgccgtggcggaacgcctcgcccgctctgcaggggatgtccgcctgg 299
G E Q I A V A E R L A R L Q G M S A W

FIG. 2B

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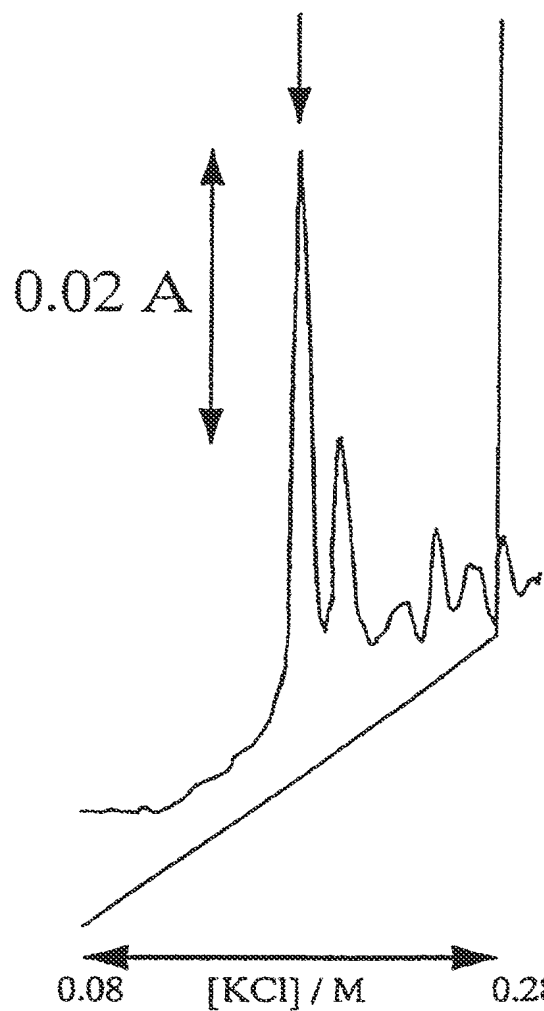


FIG. 3A

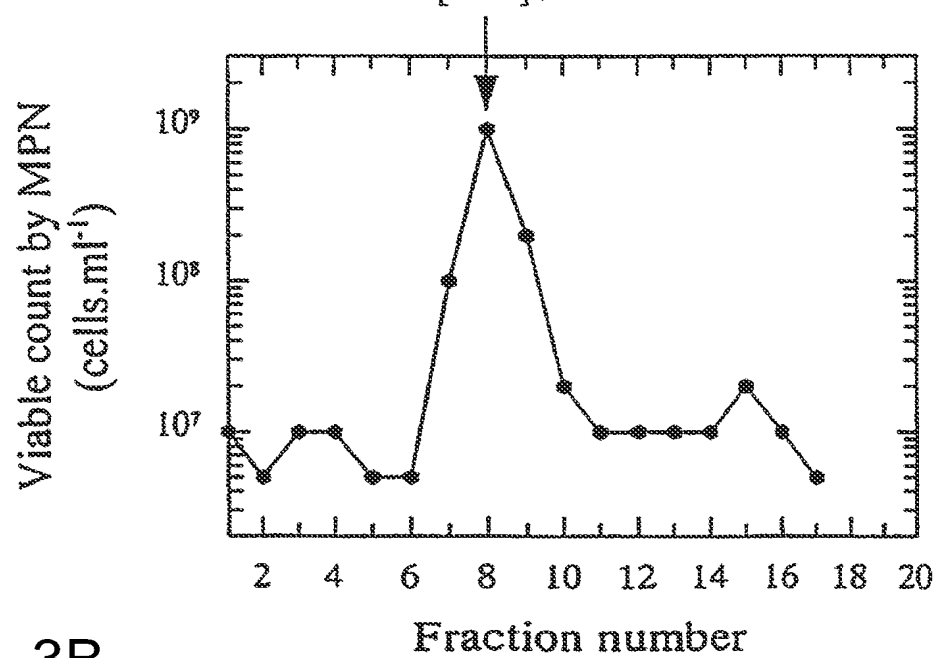


FIG. 3B

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FIG. 3C

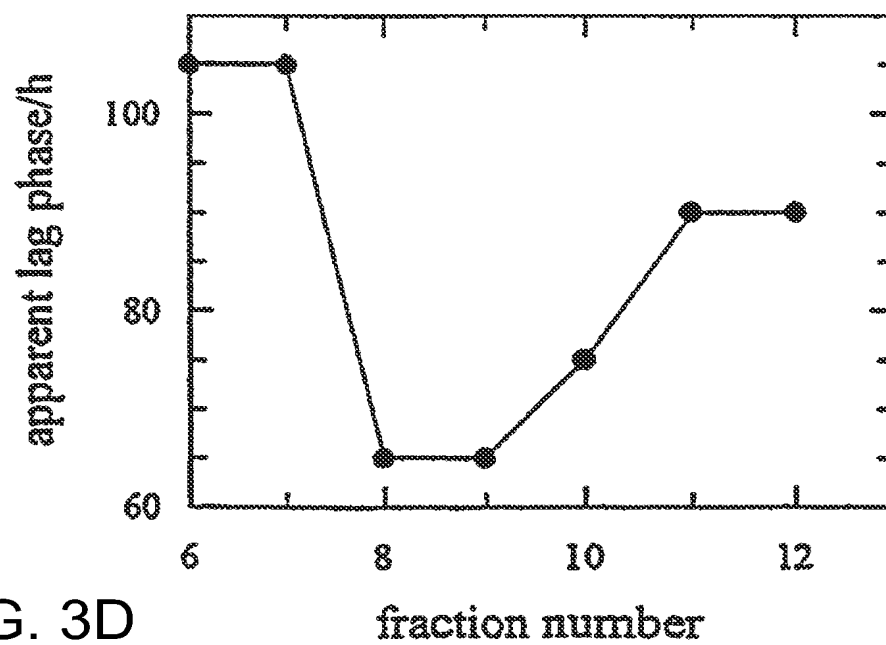
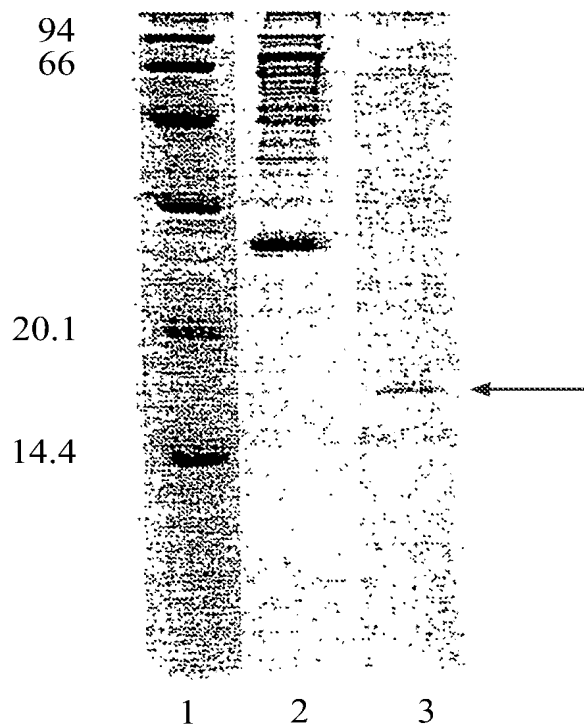
 M_r (kDal)

FIG. 3D

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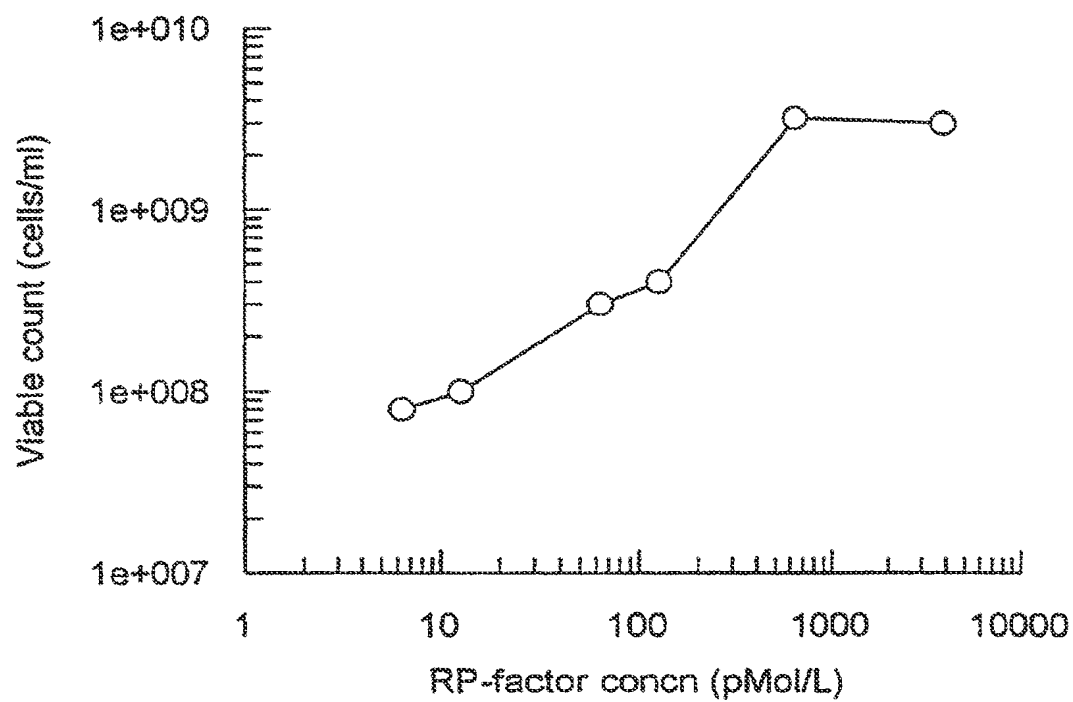


FIG. 4A

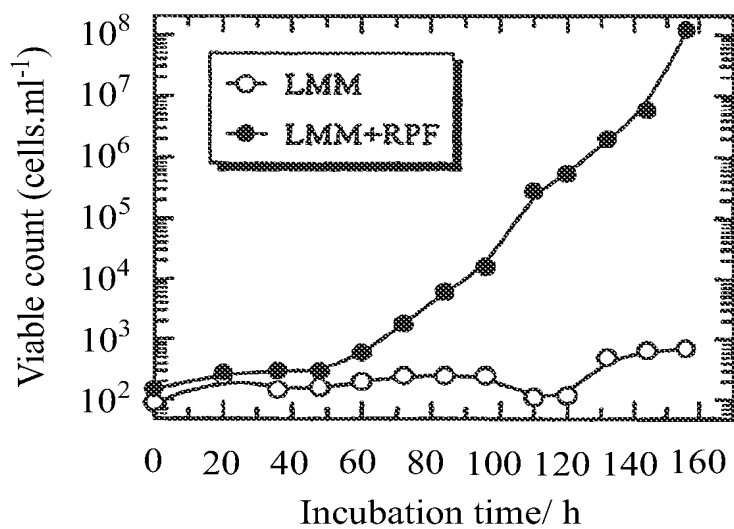


FIG. 4B

REPLACEMENT SHEET

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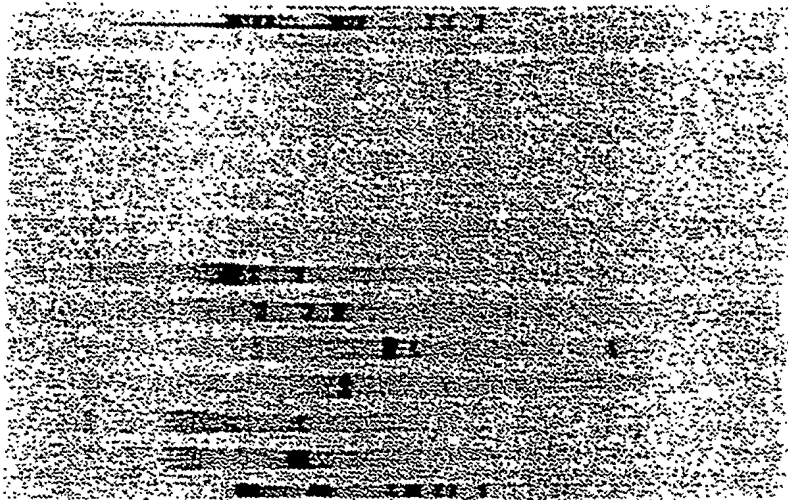


FIG. 5C

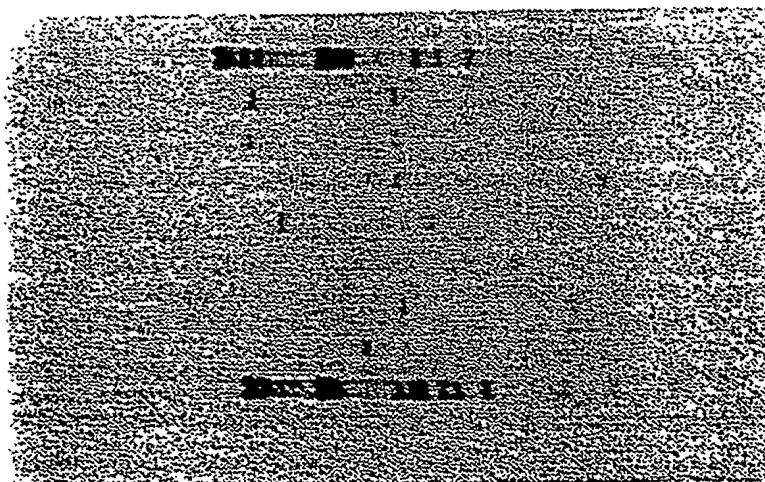


FIG. 5B

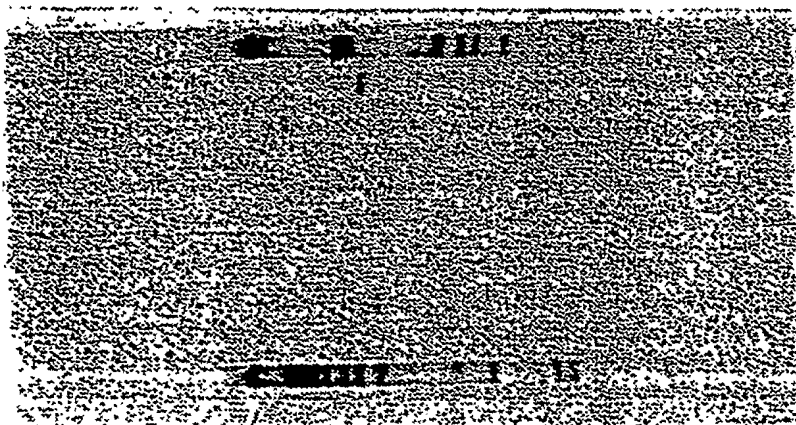


FIG. 5A

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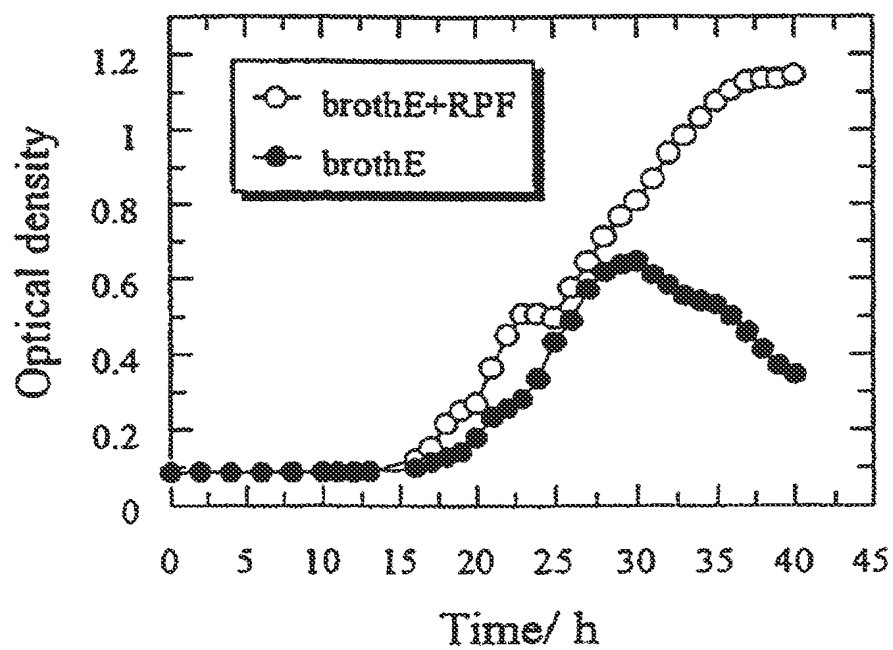


FIG. 6A

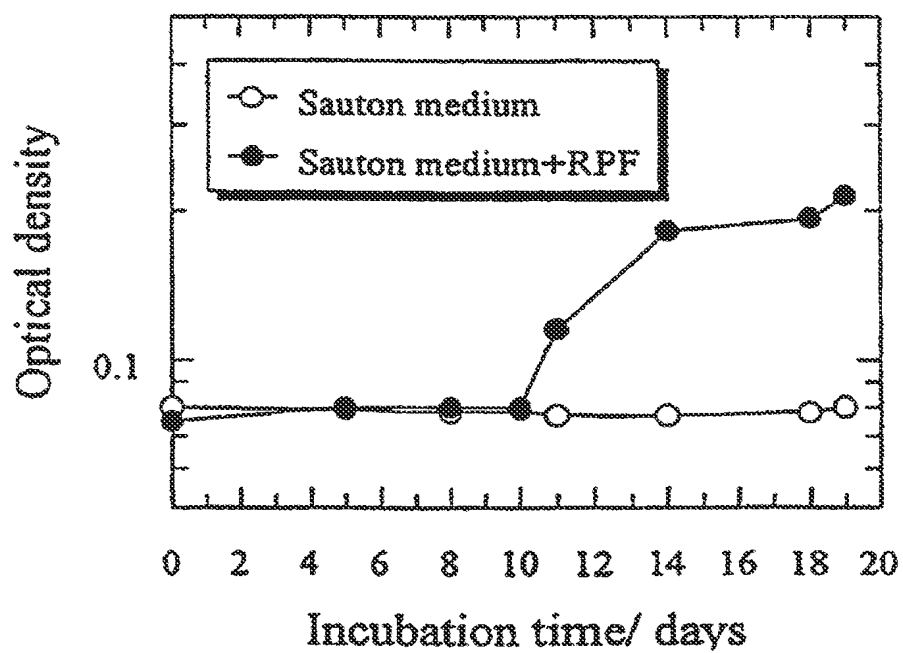


FIG. 6B

REPLACEMENT SHEET

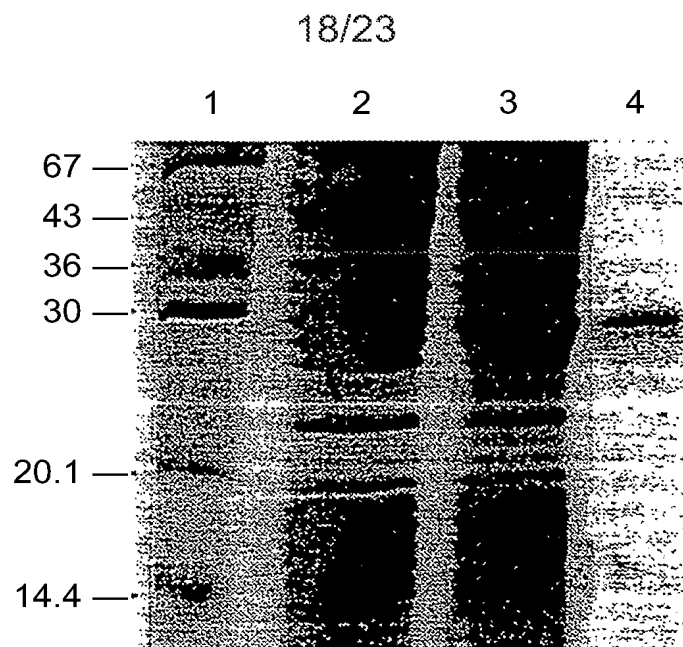


FIG. 7A

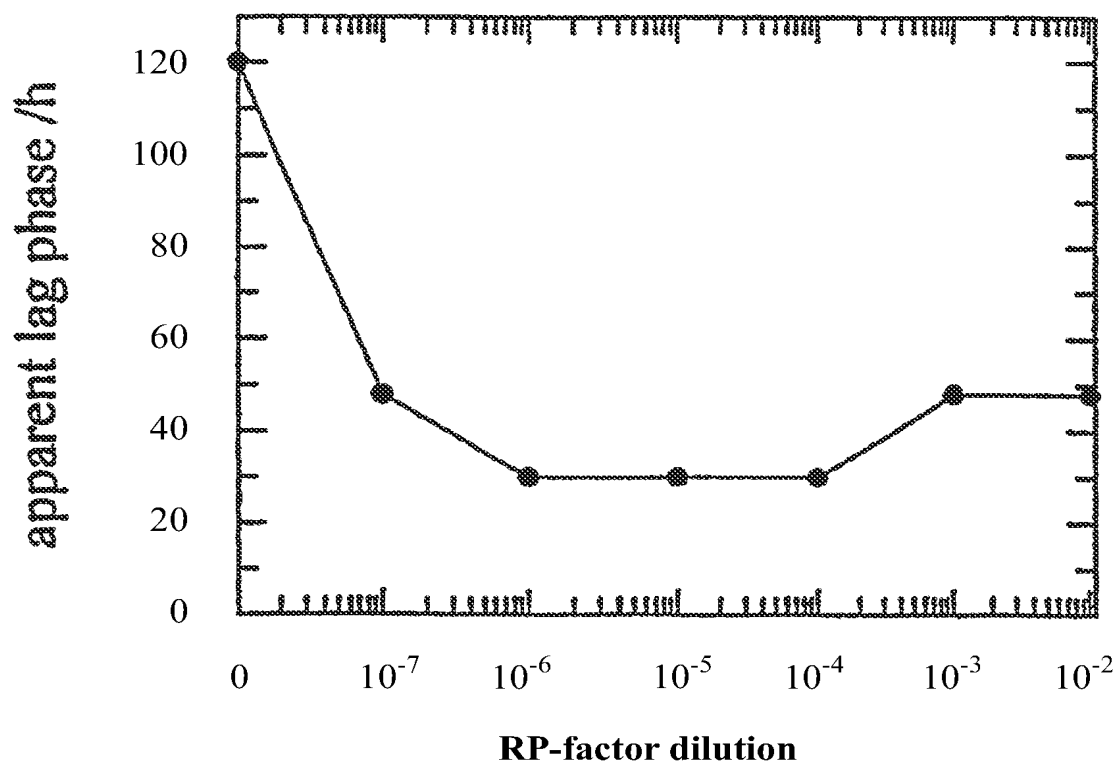


FIG. 7B

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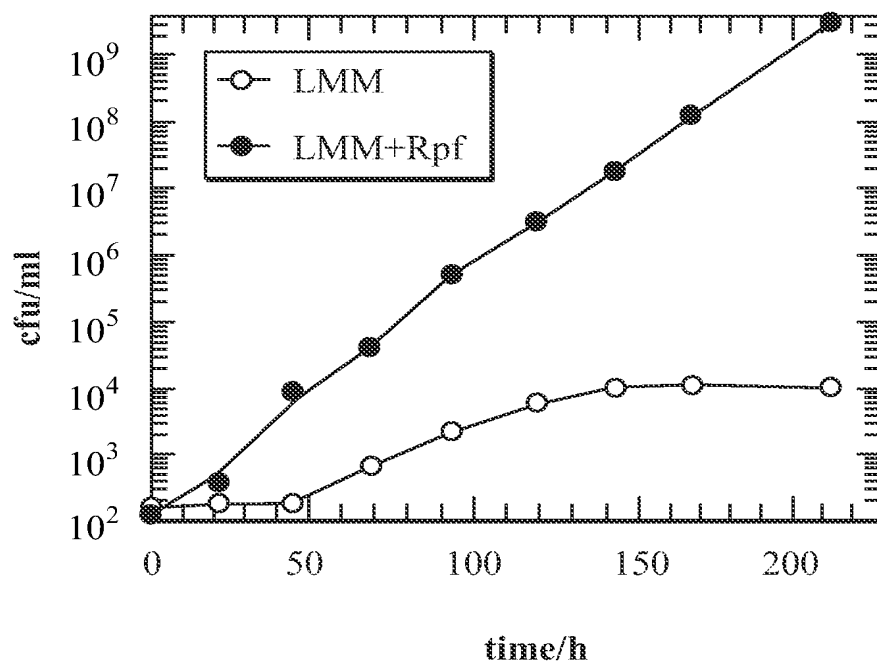


FIG. 7C

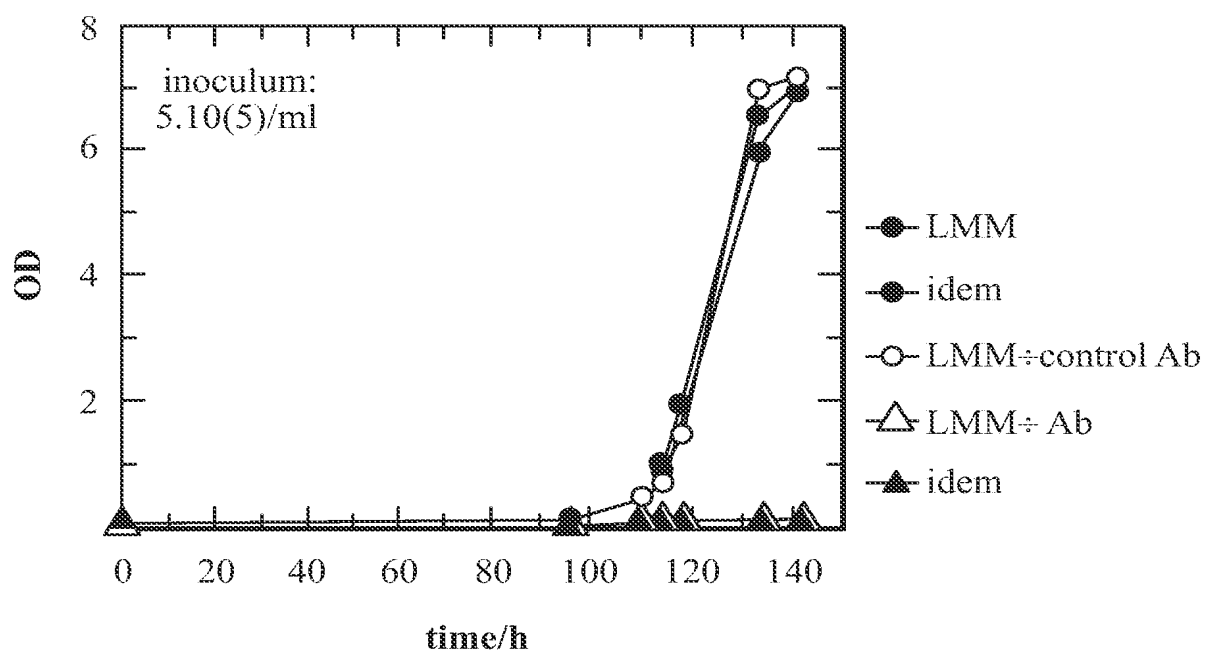


FIG. 8A

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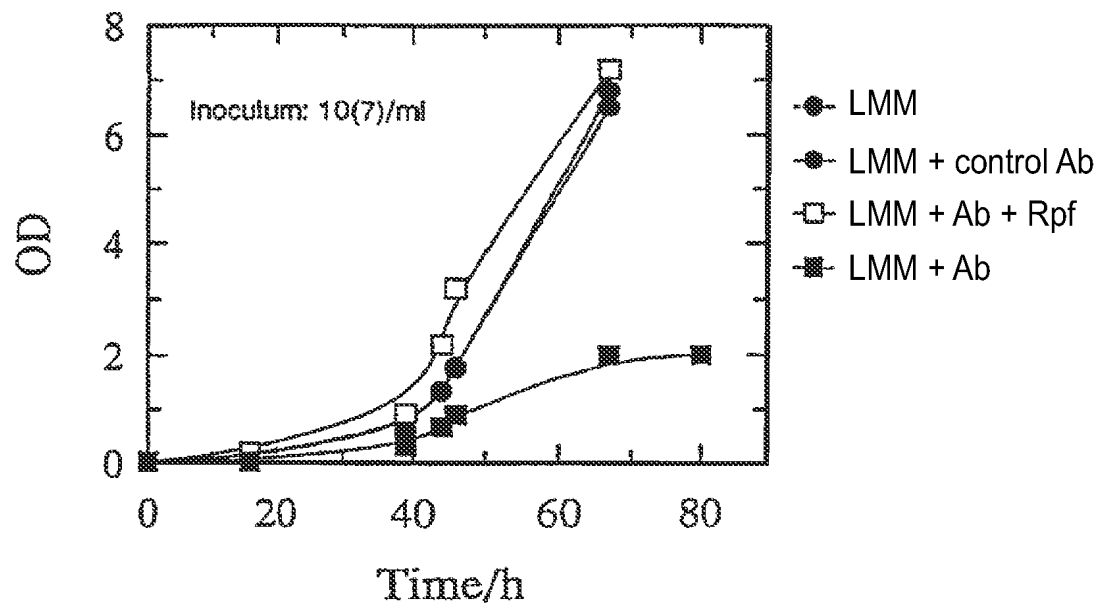


FIG. 8B

REPLACEMENT SHEET

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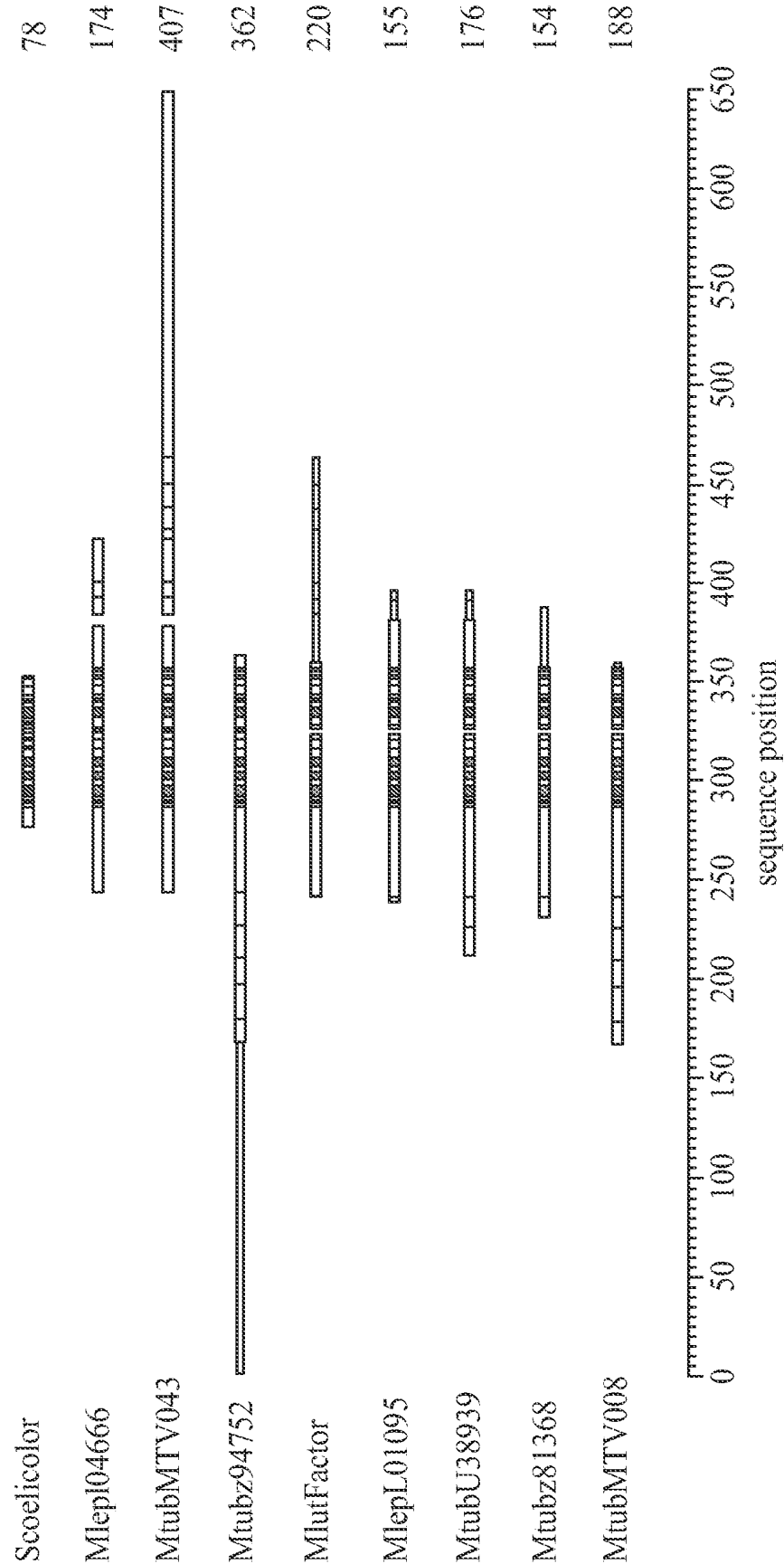


FIG. 9A

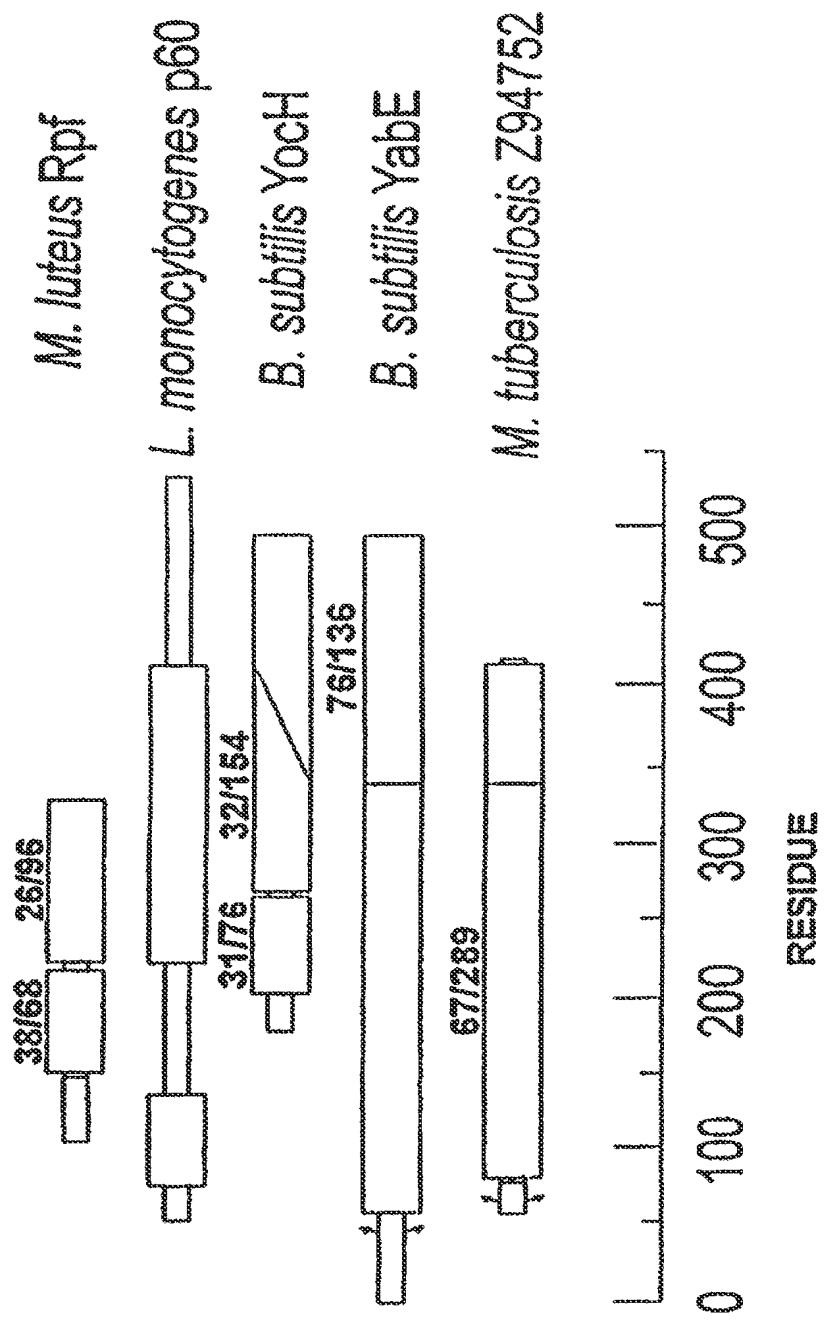


FIG. 9B

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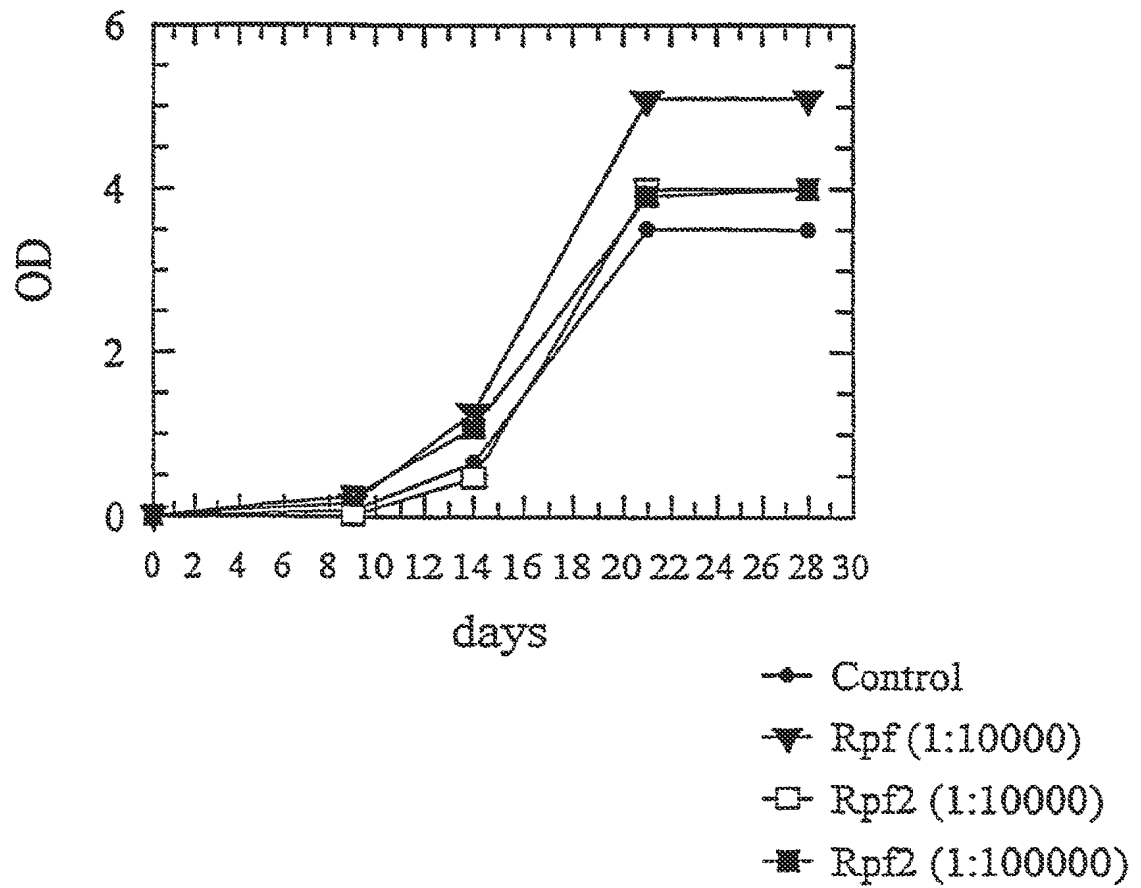


FIG. 10